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ABSTRACT

This paper focuses on the initial phase of a curriculum mapping program as part of the development of a state-mandated school improvement plan. Mapping, a system of curriculum analysis and subsequent alignment, has been cited as a valuable component of curriculum renewal and staff development that has positive impacts on student achievement and teacher job satisfaction. Arkansas has mandated that curriculum mapping be an integral component of the Arkansas Consolidated School Improvement Plan process, but has left school districts with no formal or structured guidance for this aspect of school improvement planning. This paper attempts to address concerns of administrators and teachers mired in this stage of the school improvement process. It shares various observations and suggests some guidelines relative to the strategic implementation of a curriculum mapping plan within the framework of the school improvement process. Particular areas of concern include: (1) districtwide efforts to account for site-based flexibility; (2) development of a unified computer curriculum mapping database; (3) guidelines for securing staff adoption of a curriculum mapping proposal; and (4) long-term planning aimed at increasing staff interest and commitment. (Author/SLD)

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Ensuring the Viability of Curriculum Mapping in a School Improvement Plan

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Abstract

This paper focused on the initial phase of a curriculum mapping program as part of the development of a state-mandated school improvement plan. Mapping, a system of curriculum analysis and subsequent alignment, has been cited as a valuable component of curriculum renewal and staff development (English, 1984; Jacobs, 1997). Further research has described the efficacy and positive impact that curriculum mapping has on student achievement and teacher job satisfaction. Particularly valuable is the much-needed flexibility to address the changing curricular needs of each school district, as well as the anticipated level of teacher participation respective to curriculum restructuring.

The state of Arkansas has mandated that curriculum mapping be an integral component of the ACSIP (Arkansas Consolidated School Improvement Plan) process but has left school districts with no formal or structured guidance for this aspect of school improvement planning. However, school districts in Arkansas have banded together in electronic message boards and professional workshops to get a sense of how to make this innovative program of curriculum mapping work. Yet, there has been little evidence that a wholehearted commitment to mapping has been made statewide. Given this perspective, this paper attempted to address concerns of administrators and teachers mired in this stage of the school improvement process.

This paper shared various observations and guidelines respective to the strategic implementation of a curriculum mapping plan within the framework of the school improvement process. Particular areas of concern included the following: districtwide efforts to account for site-based flexibility, development of a unified computer curriculum mapping database, guidelines for securing genuine staff adoption of a curriculum mapping proposal, and long-term planning aimed at sustaining staff interest and commitment.

Ensuring the Viability of Curriculum Mapping in a School Improvement Plan

This position paper focuses on the initial phase of a curriculum-mapping program as part of the development of a state-mandated school improvement plan. Mapping, a system of curriculum analysis and subsequent alignment, has been cited as a valuable component of curriculum renewal and staff development (English, 1983; Jacobs, 1997). Further research has described the efficacy and positive impact that curriculum mapping has on student achievement and teacher job satisfaction. Particularly valuable is the much-needed flexibility to address the changing curricular needs of each school district, as well as the anticipated level of teacher participation respective to curriculum restructuring.

A clear definition of curriculum mapping appears in the ASCD literature:

> Curriculum mapping is a tool for gathering data on what teachers are actually working on with their students through the course of the school year. When a school undertakes curriculum mapping, all teachers at the school enter information about their classroom curricula into a computer database that is geared to the school calendar. Teachers enter three types of data: content (key concepts, essential questions); specific skills (often based on state standards); and assessments (tests, products, or performances). (2000, p. 2)

The state of Arkansas has mandated that curriculum mapping be an integral component of the ACSIP (Arkansas Consolidated School Improvement Plan) process but has left school districts with no formal or structured guidance for this aspect of school improvement planning. Although school districts in Arkansas seem to have embraced the state's school improvement plan, there has been little evidence that a wholehearted commitment to mapping has been made statewide. Given this perspective, this paper attempts to address concerns of administrators and teachers mired in this stage of the school improvement process.

This paper aims to share various observations and guidelines respective to the strategic implementation of a curriculum-mapping plan within the framework of the school improvement process. Particular areas of concern included the following: districtwide efforts to account for site-based flexibility, development of a unified computer curriculum mapping database, guidelines for securing genuine staff adoption of a curriculum mapping proposal, and long-term planning aimed at sustaining staff interest and commitment.

More and more, educational leaders have been challenged to change the tide of negativity against curriculum planning, realignment, and articulation. This negativity not only aggravates a demoralizing sense of apathy toward innovative educational programs but also toward the school culture as well. Contrary to conventional wisdom, it is not just the veteran teachers who exude this negativity. Novice teachers also are infected with pessimism when educational policies, such as curriculum mapping, bear no fruit and simply waste time.

It is understandable why this negativity persists: policy implementation is all too often an unplanned motley of activities not specifically designed for improving education. Instructional leaders are now, more than ever, charged to redesign professional program development to a bold, substantive time for professionals to sharpen their skills, to gain a sense of collegiality, and ultimately to provide opportunities for students to gain a quality education.

Promoting a sense of collegiality among the departments is a high priority. One way to achieve this sense of professional community is through curriculum mapping. This ongoing project involves mapping the entire curriculum of our school so that every person involved in the educational process—students, parents, teachers, administrators, and others—can have an overview of what we teach. Part of this plan calls for a mixed group of teachers to review each subject area's map, allowing, for instance, the science instructors to see where their own

curriculum might coordinate with the math department's objectives, or where the English teachers might prove to be of some assistance to the history teacher who has a research paper included in his or her curriculum. Curriculum mapping replaces the dusty curriculum guides on teacher's shelves with dynamic, data-driven models of learning.

To ensure success for all, each school should be committed to the systematic planning, reflection, and realignment of what is taught. To do this expediently and within the parameters of most school district's lesson plan submission policy, teachers complete a formatted lesson plan each month. A formatted lesson plan (FLP) is an overview of what the instructor will teach during the next month. This formatted lesson plan includes essential questions, which serve as the scope and sequence of a unit. Essential questions represent the conceptual commitment the teacher and students will have to a unit. According to Research Cycle Model (1995),

> Essential questions reside at the top of Bloom's Taxonomy. They require students to evaluate (make a thoughtful choice between options, with the choice based upon clearly stated criteria), to synthesize (invent a new or different version) or to analyze (develop a thorough and complex understanding through skillful questioning.

Formatted lesson plans also include the state frameworks, the actual content and skills to be mastered, activities, technology resources, and assessment strategies. With this monthly overview as a resource, the teacher then creates his or her daily lesson plans. Jacobs (2000) adds that preliminary curriculum guidelines, which are found within formatted lesson plans, are an intention of what is to be taught, and maps are the reality. At the end of each month, the teacher reflects on what had been planned in the formatted lesson plan and creates a curriculum map of what had actually been taught.

Once the formatted lesson plans have been established, the instructional period is over, and the teachers have completed a map of what he or she actually taught, the faculty must then articulate the curriculum. Articulation encompasses the application of what is taught to what students actually learn. The second phase of the curriculum mapping effort begins in the subsequent school year, when teachers engage in mixed group review, in which teachers across departments reflect on the maps created for this year. This process will then proceed into vertical (among grades) and horizontal (within and among departments) alignment of the curriculum and an articulation of the curriculum to the mission of our school and to the service of our students. All teachers must be involved in this formal process of curriculum realignment and articulation. This collaboration of peers effects a sustainable commitment to teaching to specific state and organizational frameworks and to a team approach to teaching all students in all areas.

Beginning the curriculum mapping, or auditing, process can be shaky, respective to intradistrict procedures and paradigms. Different standards of record keeping hamper a fully unified effort, which is essential to having a faculty embrace the process. Adopting a systematic yet flexible process is vital to strip away the nonprogresseive sentiments and the false sense of autonomy that exists with many teachers, particularly those in the secondary school setting (Jacobs, 2001). Curricular isolation does not fit with a 21st century school model—subjects are much too interrelated for teachers to be entrenched in autonomous and unilateral curriculum decisions. The preceding reasons are exactly why the planning stage, the stage before teachers actually map, is absolutely essential. Planning for ease of use and flexibility add to the long-term stability and success of the mapping model.

To improve student achievement and to foster a positive educational environment, educators must reflect, plan, and act in a focused, conscientious way. The problem, however, with

reflection is that many times educators rely on anecdotal reports of success and failure, which are shared in the teacher's lounge. To effect real, sustained improvement, educators must primarily rely on cold, hard data. Instructional leaders can claim that a particular program is successful, but successful to what end? If the goal is to improve student achievement on the state benchmarks, do educators make sure that subtest scores are analyzed? Does the school know how to interpret the results and share them with parents and other stakeholders? For these and other questions, instructional leaders must continually assess how professional development serves to integrate data collection and the mapping process.

Rather than relying on a haphazard approach with no clear objectives, schools must use data as the foundation of professional development activities. A structured, data-based system helps teachers and administrators to establish and reassess meaningful activities and programs in a timely and efficient way. Within the ACSIP model, teachers and administrators monitor a five-year range of data from a variety of standardized assessments and perceptual surveys to analyze strengths and weaknesses of various educational programs and interventions, including mapping. Relying on this data, priority committees focus on specific areas of school improvement and lead the rest of the staff in forming research-based interventions. To ensure future success, these interventions all directly relate to the mission statement and are supported by measurable benchmarks. Each department then has the responsibility for evaluating its effectiveness in teaching and its efficacy relative to what is planned and what is actually taught. One such intervention is the genuine adoption of curriculum mapping and articulation. To do this, teachers must feel comfortable with entering and accessing curriculum data; therefore, schools can modify their existing lesson plan structure to accommodate the mapping model through the use of formatted lesson plans.

Formatted lesson plans and subsequent maps should be completed by grading period in order to give teachers and administrators a sense of enclosure within the class structure. Furthermore, mandatory end of grading period assessments (e.g., six week tests, criterion referenced benchmark tests, etc.) must be coordinated respective to this need. This means that the mapping process should not only include, but also integrate benchmark data measuring student achievement. Paramount in this process is the alignment of what is taught to interpretations of the benchmark data established initially and throughout the process. Wilson emphasizes this point clearly: "By thoroughly analyzing what teachers are actually working on with their students rather than what the guides say, they are supposed to be working on authentic adjustments [that] can be made, directly affecting the learner" (2001).

Data driven analysis can add to the value-added aspect of mapping. It is something that gives credence to what teachers teach and a validation of the curriculum as a whole. Furthermore, every class, not just math, science, and literacy, needs measurable standards. Inherent in the success of the mapping process is knowing where students are supposed to be going and to what extent they have reached their objectives. This validation does not only directly impact students but also gives teachers the intrinsic motivation of knowing what they teach is actually being learned and used. Collaboration through critical feedback, and based on data, is a vital piece to the success of the student as learner and the teacher as teacher (Costa & Kallick, 1993).

Once the foundation has been laid for mapping, schools must take the necessary steps to find time to develop teacher's skills and knowledge in creating, revising, and reviewing their formatted lesson plans and maps. Many strategies to increase time for staff development have been discussed in the professional literature. Every sort of strategy, from team-teaching

paradigms to modified block schedules, has been presented. The truth is that each school must pick the strategy that fits its school model and meshes with the culture of the staff, the administration, the students, and the community. Schools must find time somewhere so that it does not negatively impact the students' education. Also, schools must constantly communicate with the community and all of the school's stakeholders on the mapping strategy. One way to effectively communicate the need for modifying school schedules to accommodate mapping is to show how the process directly relates to students' education.

Incorporating technology in the mapping process is of paramount importance. Technology now efficiently allows schools to input and retrieve large amounts of data without respect to geography and distance. Noting that teachers should have the ability to enter mapping data in a simple format, the process of mapping can be streamlined, allowing greater ease of database compiling. As well, this efficiency not only encourages teacher acceptance of the process, but also it encourages an open curriculum in which teachers can truly teach across the disciplines (Wilson, 2001).

To make technology work, each school district should make a decision as to what database will be employed. Many mapping programs, such as Curriculum Compass, are on the market, but dwindling school budgets may inhibit the cost for such programs. One other option is to develop a school-specific database through FileMaker or Microsoft Access; however, one must consider the time to develop and maintain such a database. One thing is constant: whether a district outsources the database construction or develops it in-house, it must ensure that the program is flexible enough to meet the needs of its various schools and that it is fully accessible to everyone in the district.

A long-term commitment to mapping can only come by infusing the process into the culture of the school. This comes from teachers understanding the workings and the value of the process. Educational leaders must take every opportunity to facilitate the process of learning the mapping paradigm and must encourage novice and veteran teachers alike to see the inherent worth in knowing how what they plan to teach actually translates into what students learn. For this reason, administrators must recruit staff members to become more informed and enthusiastic about the process. Whether this comes from professional leave time, inservice, or guided departmental meetings, teachers should have the opportunity to view mapping not as a passing educational fad but as a working model of curriculum alignment and articulation that makes better use of teacher time and school resources.

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